

# Information concerning plugs for household appliances covered by CLC/TC 61 used in the various CENELEC countries

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## National foreword

This Published Document reproduces verbatim CENELEC report R0BT-005:2001.

The UK participation in its preparation was entrusted to Technical Committee CPL/61, Safety of household and similar electrical appliances, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

### Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

**This Published Document is not to be regarded as a British Standard.**

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**Information concerning plugs for household appliances  
covered by CLC/TC 61  
used in the various CENELEC countries**

This CENELEC Report has been prepared by the CENELEC Reporting Secretariat SR 23B. It was approved for publication by the CENELEC Technical Board on 2001-08-01.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

## CENELEC

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## 1 Introduction

The object of this CENELEC Report is to provide information concerning the National solutions for plugs for household appliances as a result of the enquiry at BT level, whose background is given in the following.

On the occasion of 97 BT, September 1998, a proposal from CLC/TC 61 to introduce the identified special requirements of countries for plugs as special national conditions in EN 60335-1 "Safety of household and similar electrical appliances – Part 1: General requirements" was suspended because such special requirements were:

- 1) occurring in other countries than those identified in EN 60335-1;
- 2) applying also to other products than household appliances.

Therefore, BT decided to launch an enquiry at BT level on these special national conditions involving all CENELEC National Committees.

At the end of the year 1998, 13 answers among the 19 CENELEC National Committees were collected. Due to unfortunate circumstances the file was not elaborated and presented to BT.

Following the reminders of CLC/TC 61, BT noted the partial results of the BT enquiry and decided, with BT decision D104/069, to complete such enquiry on special requirements for plugs existing in the countries covered by the CENELEC membership on request of BT. This last task was assigned to SR 23B (IT).

SR 23B (IT) and the Italian National Committee prepared a first questionnaire, with the intention of showing the data in a homogeneous way, that was distributed to the CENELEC National Committees. According to the answers received, a second form was issued, better specifying the principal questions, also by means of a table to fill in. Contacts were taken with the BT delegates in order to collect the required data, which are reported in the following.

The work has been planned on the basis of the plugs for household applications and similar purposes, with voltage 250 V a.c. and current up to 16 A, which are commonly used for household appliances covered by CLC/TC 61.

The forms have been filled in by the CENELEC National Committees involved under their own responsibility.

## 2 Scope

This CENELEC Report collates the national information on plugs for household appliances covered by CLC/TC 61 and provides a comparative guide to the following questions:

- special national conditions based on regulations applicable to plugs;
- national standards applicable to plugs;
- CLC/TC 61 products or product families affected by the requirements;
- CLC/TC 61 (draft) European Standards affected by the requirements;
- summary description of the requirements:
  - characteristics of the plugs (number of poles; rated current; rated voltage),
  - standard sheets according to:
    - national standards
      - ✓ identification
      - ✓ standard sheet
    - IEC Report 60083;
- main products or product families other than those covered by CLC/TC 61 affected by the requirements;
- additional information concerning safety.

Each one of the 19 following forms is relevant to a single CENELEC country and the collected data reflect the present situation.

Shape and main characteristics of the plugs mentioned can be found in the Technical Report IEC 60083:1997 "Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC".

## **Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61**

**1. Country: AUSTRIA**

**2. Special national conditions based on regulations applicable to plugs:**

Elektrotechnikverordnung 1996-ETV 1996, BGBl. N° 105, dated 7 March 1996.

**3. National standards applicable to plugs:**

OVE-IG 31: 1979 with its amendments "Plug and socket-outlets for household installations and similar purposes" (similar (1) to CEE-Publication 7)

ÖVE-IG/EN 50075: 1990 "Flat non-rewirable two-pole plugs, 2,5 A - 250 V, with cord, for the connection of class II equipment for household and similar purposes" (identical to EN 50075:1990)

ÖNORM E 6620 May 1994 "Two-pole plugs for class II appliances, 2,5 A - 250 V" (similar (1) to CEE-Publication 7, sheet XVI)

ÖNORM E 6623 May 1994 "Two-pole plugs with earthing contacts 10/16 A - 250 V" (similar (1) to CEE-Publication 7, sheets IV and VII)

ÖNORM E 6624 September 1979 "Two-pole plugs for class II appliances 10/16 A - 250 V" (similar (1) to CEE-Publication 7, sheet XVII)

(1)The word "*similar*" is indicating various deviations from CEE-Publication 7, e.g. plugs without earthing contacts (excepted plugs for class II appliances) are not allowed. Furthermore, there are additional requirements for plugs and socket-outlets in drip-proof construction, etc.

**4. CLC/TC 61 products or product families affected by the requirements:**

Household and similar electrical appliances

Hand-held and transportable motor-operated electric tools

Electrical equipment of non-electric appliances for household and similar purposes

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

All electrical equipment listed under items 4 and 7 are affected by the special requirements related to plugs for household appliances and similar purposes.

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
			National Standard		IEC Report 60083
N° of poles	Rated current A	Rated voltage V	Identification	Standard sheet	
2P	2,5	250	ÖVE-IG/EN 50075:1990		AT4
2P	2,5	250	ÖNORM E 6620 1994		AT4
2p+earth	16	250	ÖVE-IG 31/1979		
2p+earth	10/16	250	ÖNORM E 6623 1994		AT1
2P	10/16	250	ÖNORM E 6624 1979		AT2

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

- Luminaires and related equipment
- Medical electrical equipment
- IT equipment
- Audio, video and similar electronic equipment
- Electrical equipment of machines
- Isolating transformers and safety isolating transformers

**8. Additional information concerning safety:**

None.

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** BELGIUM

**2. Special national conditions based on regulations applicable to plugs:**

Ministerial decree of 28 June 1978 concerning plugs and the connection between mobile devices.

**3. National standards applicable to plugs:**

NBN C61-112-1

NBN C 61-075 (EN 50075)

**4. CLC/TC 61 products or product families affected by the requirements:**

All devices at 230V - 250V.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

All standards concerning devices supplied at 230 – 250V requiring a plug.

**6. Summary description of the requirements:**

Characteristics of the plugs			Reference to the standard		
N° of poles	Rated current (A)	Rated voltage (V)	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P <sup>1)</sup>	2,5	250	NBN C 61-112-1	XVI Variant I and II	BE2
2P <sup>1)</sup>	2,5	250	NBN C 61-075	I	?
2P <sup>2)</sup>	16	250	NBN C 61-112-1	XVII	BE2
2P+ earth <sup>3)</sup>	16	250	NBN C 61-112-1	VI	BE1
2P + earth <sup>4)</sup>	16	250	NBN C 61-112-1	VII	BE1

1) plug, for class II devices,  
 2) plug, for class II devices,  
 3) plug, for class I devices,  
 4) plug, for class II devices, (with double earthing contact)

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

All devices at 230 V – 250 V requiring a plug (e.g. portable luminaires, television sets, etc.).

**8. Additional information concerning safety:**

None.



## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

1. Country: **SWITZERLAND**

2. Special national conditions based on regulations applicable to plugs:

3. National standards applicable to plugs:

SN EN 50075, SEV/ASE 6533, SEV/ASE 6534

4. CLC/TC 61 products or product families affected by the requirements:

5. CLC/TC 61 (draft) European Standards affected by the requirements:

6. Summary description of the requirements:

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	SN EN 50075		CH1
2P	10	250	S 24 504		
2P	10	50	S 24 516		
2P	10	250	SN SEV 6533-2		CH1
2P+ earth	10	250	SN SEV 6534-2		CH2
2P	16	250	SN SEV 5933-2		
2P+ earth	16	250	SN SEV 5934-2		

7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:

8. Additional information concerning safety:

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** CZECH REPUBLIC

**2. Special national conditions based on regulations applicable to plugs:**

None.

**3. National standards applicable to plugs:**

For all electrical equipment/appliances:

CSN 35 4515, CSN 35 4516, CSN EN 50075

**4. CLC/TC 61 products or product families affected by the requirements:**

All electrical appliances.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

All EN/prEN intended for electrical equipment/appliances.

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	CSN 35 4516 CSN 35 4515	C5	CZ2
2P	2,5	250	CSN 35 4516 CSN 35 4515 CSN EN 50075	C5	CZ3
2P	10/16	250	CSN 35 4516 CSN 35 4515	C6	CZ2
2P + earth	10/16	250	CSN 35 4516 CSN 35 4515	C4	CZ1
2P + earth	10/16	250	CSN 35 4516 CSN 35 4515	C3b	CZ1

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

EN 60950 (luminaires), EN 60598

**8. Additional information concerning safety:**

In the Czech Republic class 0 is not used. For class II non-rewirable plugs only are allowed.

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country: GERMANY**

**2. Special national conditions based on regulations applicable to plugs:**

**3. National standards applicable to plugs:**

DIN VDE 0620-101, DIN 49406, DIN 49441, DIN 49443, DIN 49446, DIN 49448, DIN 49464

**4. CLC/TC 61 products or product families affected by the requirements:**

All.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

EN 60335, EN 50144

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	DIN VDE 0620-101		DE2
2P	2,5	250	DIN 49464		DE2
2P	16	250	DIN 49406		DE2
2P+ earth *	16	250	DIN 49441		DE1
2P+ earth **	16	250	DIN 49441		DE1
2P + N + earth	16	230/400	DIN 49446		DE3
2P + N + earth **	25	230/400	DIN 49448		DE3

\*with side earthing-contact  
\*\*with dual earthing-contact

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

All products equipped with plugs used:

- for production workshop for film and television
- in communal facilities
- electrical installation of building

**8. Additional information concerning safety:**

None.

## **Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61**

**1. Country: DENMARK**

**2. Special national conditions based on regulations applicable to plugs:**

Electricity Council Bulletin – Installations, no. 3/98: Protection against indirect contact

Electricity Council Bulletin – Material, no. 4/98: Use of plugs on appliances.

See enclosed Bulletins in English

**3. National standards applicable to plugs:**

Danish Heavy Current Regulation No. 107-1: 1998 (IEC 60884-1 Ed.1: 1987 + A1:1988 with Danish modifications and explanations)

Danish Heavy Current Regulation No. 107-2-D1 Ed.3: 1998 (Particular requirements for Danish plug and socket-outlet systems)

**4. CLC/TC 61 products or product families affected by the requirements:**

All.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

EN 60335, EN 50144, EN 61029 and EN 61176

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2p	2,5	250	Danish Heavy Current Regulation No.107-2-D1 Ed.3: 1998	C5	
2P	10	250		DKA2-1a	DK4/DK5
2P	10	250		DKA2-1b	DK5/DK6
2p	10/16	250		C6	
2p	10/16	250		C 1b	
2P + earth	10/13	250		DK2-1a	DK 1/DK2
2P + earth <sup>1)</sup>	10/13	250		DK2-5a	DK 2/DK3
2P + earth <sup>2)</sup>	10/16	250		C 2b	
2P + earth <sup>2)</sup>	10/16	250		C 3b	
2P + earth <sup>2)</sup>	10/16	250		C 4	
3P + earth	16	250/440		DK 6-1a	DK 3

1) for information technology  
 2) does not provide earth connection and is allowed under the circumstances described under paragraph 2 and 8

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

All electrical equipment connected to socket-outlets for household and similar purpose covered by other CLC/TC's such as e.g. luminaries, electromedical equipment, TV sets, computers.

**8. Additional information concerning safety:**

For appliances for use in installations installed in accordance with the Danish Wiring Rules valid from 1 April 1994 (Stærkstrømsbekendtgørelsen, Elektriske Installationer) the following applies:

When an appliance is prepared for use by an installer, it is his responsibility that the correct plug is used – e.g. regarding protective earth, to ensure that the requirements for protection against indirect contact are fulfilled. This is applicable when the appliance is delivered with or without a plug.

For appliances for use in installations installed before 1 April 1994 the requirements in Electricity Council Bulletin - Installations, no. 3/98 applies.

### Use of plugs on appliances

In all the sections of the Heavy Current Regulation which apply for different types of appliances, special Danish requirements are introduced regarding which plugs shall/must be used for the appliances in question. Since the mentioned paragraphs have been written at different periods of time the requirements regarding plugs are not completely consistent. Doubt especially arises regarding the requirements for earth connection of appliances of class I in the paragraphs, which refer to the Danish Heavy Current regulations of 1962, section 10, which no longer apply.

ECB no. 3/98 (ELRÅD-meddelelse/installationer nr. 3/98) indicates some transitional requirements regarding protection against indirect contact of installations and appliances, but these requirements are not exhaustive for equipment when it is supplied from manufacturers or other suppliers.

In the following, a summary is given of the plugs, which can be or should be used in different circumstances. Reference is made to:

Section 107-2-D1	Plugs and socket-outlets for household and similar purposes	
	EN 50 075	Flat non-rewirable two-pole plugs, 2.5 A 250 V, with cord, for the connection of class II-equipment for household and similar purposes
	EN 60 309-2	Plugs, socket-outlets and couplers for industrial purposes(former section 117/CEE 17)

#### 1. Appliances with rated current of maximum 13 A

In the requirements for appliances a limit is given at 10 A rated current for appliances with ordinary 250 V plugs. This limit is increased to 13 A when using plugs with 13 or 10/16 A rated current, according to section 107-2-D1 (as modified per April 1<sup>st</sup>, 1998).

##### 1.1 Appliances of class I

As a principal rule, a series of different plugs are allowed for appliances of class I.

Section 107-2-D1	Standard sheet DK 2-1a*	Two-pole plug with earthing pin 10A 250V~
	Standard sheet DK 2-5a*	Two-pole IT plug with earthing pin 10A 250V~
	Standard sheet DKA 2-1a	Two-pole round plug without earthing pin 10A 250V~
	Std sheet DKA 2-1b	Two-pole flat plug without earthing pin 10A 250V~
	Standard sheet C 1b	Two-pole plug without earthing contact 10/16 A 250 V~
	Standard sheet C 2b	Two-pole plug with side earthing contacts 10/16 A 250 V~ (so called Schuko plug)
	Standard sheet C 3b	Two-pole plug with pin-type earthing contact 10/16 A 250 V~ (French-Belgian system)
	Standard sheet C 4	Two-pole plug with dual earthing contacts 10/16 A 250 V~ (combined French-Belgian system and Schuko)

The two-poled Danish plug with earthing pin (marked with \*) shall be used on appliances which have a socket-outlet (with earthing contact) to the supply of other equipment and in a few other cases as mentioned in the following:

Electromedical equipment (Heavy current regulations section 135-1) (Elektromedicinsk udstyr Stærkstrømsbekendtgørelsen afsnit 135-1)	Requirement for two-poled plug with earthing pin Older type of two-poled plug with earthing with flat phase pin is allowed.
Isolating transformers and safety solating transformers (section 145) (Beskyttelsestransformere og sikkerhedstransformere” afsnit 145)	No requirements for transformers of ordinary construction Requirement for two-poled plug with earthing pin for higher degrees of protection.

## 1.2 Appliances of class II

Appliances of class II neither may nor must be connected to earth. The following plugs can be used optionally, depending only on the rated current (and maximum 13 A):

Section 107-2-D1 Standard sheet DKA 2-1a	Two-pole round plug without earthing pin 10 A 250 V~
Standard sheet DKA 2-1b	Two-pole flat plug without earthing pin 10 A 250 V~
Standard sheet C 1b	Two-pole plug without earthing contact 10/16 A 250 V
Standard sheet C 5	Two-pole plugs for Class II appliances 2.5 A 250 V
Standard sheet C 6	Two-pole plug for Class II appliances 10/16 A 250 V
EN 50 075 Standard sheet I	Flat 2,5 A 250 V European two-pole plug for class II appliances (in general identical to C 5, flat).

## 2 Appliances with rated current exceeding 13 A

Appliances with a rated current exceeding 13 A, cannot be supplied from ordinary household socket-outlets and the appliances' plugs must therefore either be the Danish poly-phased plug according to section 107-2-D1, standard sheet DK 6-1a, or an "industrial plug", according to EN 60 309-2, standard sheet 2-II or 2-IV. These plugs only exist with earthing and can therefore both be used for appliances of class I and II. For the last mentioned the earthing pin is not to be connected.

Attention is drawn to the fact that plugs for household use from certain other countries have 16 A rated current, for instance the Schuko system. For imported appliances, with a current consumption between 13 and 16 A, attention is drawn to the fact that they must not be delivered for use in Denmark, together with any of the plugs mentioned in clauses 1.1 and 1.2.

## 3 Coherence with the installation requirements

In clause 413.1.1.2 in the Heavy Current Regulations, Electrical Installations, there is a general requirement that equipment of class I must be connected to protective earth. In clause 701.471.2 an exception from this rule is given for portable appliances for household use, on the condition that the outlet is RCCB type A protected.

Furthermore, in ECB no. 3/98, some transitional provisions and requirements are given for certain appliance categories.

## 4 Special rules for certain locations

The above rules under clauses 1 to 3 generally apply for the delivery of new appliances, where the supplier does not know the final location for use.

Especially for appliances with a plug of type C 2b, 3b or C 4, which are meant to provide earth connection to socket-outlets of foreign types, and which cannot provide this to Danish socket-outlets it may in some locations of use cause the user of the appliances problems to legally use the appliance according to the installation requirements. For instance, an outdoor floodlight projector with a type C 4 plug could legally be used around housing, but it would not be legal to use it on a construction site, where earth connection is required. A two-poled plug with earthing pin (DK 2-1a) shall therefore be used.

It is therefore required, that suppliers of equipment for use in places where it is known in advance that earth connection is required, deliver the equipment with the Danish two-poled plug with earthing pin.

### **Electrical installations – Protection against indirect contact**

On April 1<sup>st</sup>, 1994, the Heavy Current Regulation's part B was replaced by the new installation requirements, Electrical installations, which as of this date have applied for all new installations and for connection of appliances to these new installations.

For **existing installations carried out before April 1<sup>st</sup>, 1994**, the following apply for extensions or modifications as well as for replacement of appliances or connection of new appliances to these installations.

#### **1 Extensions or modifications**

When in a very limited way extending or modifying an installation, for instance the installation to a few outlets (socket-outlets or the like) or appliances, it is allowed to omit the protective earth conductor, provided that the extension or the modification is supplied through an RCCB type AC or RCCB type A. (also see clause 2.2, dash 5).

#### **2 Replacement of appliances or connection of new appliances**

##### **2.1 Outlets *with* active protective earth conductor**

Appliances of class I shall be connected to the protective earth conductor.

*Exception* Exposed parts on appliances, which are connected to 230 V socket-outlets and the like in household installations, do not have to be connected to the protective earth conductor, provided that there is a RCCB type AC or RCCB type A in front (also see clause 2.2, item 5).

##### **2.2 Outlets *without* active protective earth conductor**

A requirement only exists regarding protection against indirect contact (extra protection) with appliances, which are mentioned in the following. This could mean that the installation to the relevant connection is to be modified.

In case RCCB type AC or RCCB type A is used for protection, no protective earth conductor is required (also see clause 2.2, item 5).

1. Machines designed according to the Heavy Current Regulation's part 15-1 or 204-1.
2. The following appliances which are used in agricultural buildings:
  - Feed boilers
  - Milking machines.
  - Root slicers and –conveyors.
  - Mixers for powdered milk and fresh milk, and milk coolers.
  - Facility for mucking out and associated conveyors.
  - Fertilizer and manure pumps and mixers.
  - Grain dryers.



3. The following appliances which are connected to water or steam, contains water or are used to the removal of water:
  - Pumps.
  - Cabinet showers.
  - High-pressure washing facilities, including sluicing facilities and steam cleaning facilities.
  - Washing machines, including dishwashing machines, cleaning machines, egg cleaning machines and car washing facilities.
  - Centrifugal drying machine and drying tumbler.
  - Water heaters.
4. Car engine heaters and cabin heaters for cars.
5. Electromedical equipment and other appliances and equipment which are used when examining and treating persons. Such devices of class I must always be connected to an active protective earth conductor.
6. Stationary refrigerators, freezers and other stationary cooling- or freezing devices (mass exceeding 18 kg).
7. Oil- and gas heating facilities and pumps and magnetic valves belonging to heating facilities.
8. Gambling machines and the like, which are operated by an audience.
9. Heating cables and heating wires.
10. Safety transformers.

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country: SPAIN**

**2. Special national conditions based on regulations applicable to plugs:**

Decree 2.413/1973 "Reglamento Electrotécnico para baja tensión" adapted to technical progress by Orden 1995-11-22 (BOE289/1995)

**3. National standards applicable to plugs:**

Plugs and socket-outlets used in electrical installation in the scope of the Decree 2.413/1973 shall comply to EN 50075 Europlug 2p 2,5A, UNE 20315 for all other cases.

**4. CLC/TC 61 products or product families affected by the requirements:**

All electrical appliances intended to be connected to electrical supply in electrical installations of low voltage with rated voltage up to 1000V (AC) and 1500 V (DC).

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

Mainly series EN 60335 (electric appliances).

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A <sup>1)</sup>	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	UNE-EN 50075:93	1	
2P	10	250	UNE 20315:94	ESC 10-1b	ES1 ES2
2P+ earth	10/16	250	UNE 20315:94	C2b	
2P+ earth	10/16	250	UNE 20315:94	C4	
2P	10/16	250	UNE 20315:94	C6	
2P+ earth	25	250	UNE 20315:94	ESB 25-5b	ES5

NOTE For double marking 10/16 A, 10 A direct current shall be checked

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

EN 60598 (luminaires), EN 60950 and EN 60065

**8. Additional information concerning safety:**

In the Spanish standard there are other Standards Sheets not included in the table above. The material referred on these Standard Sheets is intended to replace the existing material during a certain period of time.

## **Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61**

**1. Country: FINLAND**

**2. Special national conditions based on regulations applicable to plugs:**

No SNCs concerning harmonized standards (EN 50075).

**3. National standards applicable to plugs:**

The main National standard for plugs is *SFS 5610 Plugs and socket-outlets for household and similar purposes. General requirements*. General requirements as well as testing specifications of this National Standard are based on IEC 60884-1:1994 and the standard sheets are taken from CEE Publication 7 (Standard Sheets I, II, III, IV, VII, XVI and XVII). The following technical national modification concerning plugs exists (other national modifications apply to socket-outlets only):

- Clause 14.21: Cord extension sets for equipment of class II and plugs for equipment of class II shall be non-rewirable.

For non-rewirable 2,5 A two-pole plugs EN 50075 is used.

In addition, we have for the supply of IT equipment a special plug whose standard sheets are given in IEC 60083 (Sheet FI 3). For SELV plugs we have a national standard SFS 5798 which is technically identical with IEC 60884-2-4 and IEC 60906-3.

**4. CLC/TC 61 products or product families affected by the requirements:**

All products equipped with a flexible cord and a plug including adapters and battery chargers for different equipment (transformer and plug integrated).

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

All EN/prEN which allow products equipped with a flexible cord and a plug.

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	SFS EN 50075	(ss I)	FI 4
2P	2,5	250	SFS 5610	(ss XVI)	FI 5
2P	16	250	SFS 5610	(ss II)	FI 1
2P	16	250	SFS 5610	(ss XVII)	FI 6
2P+ earth	16	250	SFS 5610	(ss IV)	FI 2
2P+ earth *	16	250	SFS 5615	(ss IVA and ss VIIA)	FI 3 EMKO-TUI(23B-sec) 001/90
2P+ earth	16	250	SFS 5610	(ss VII)	FI 5

\*for information technology

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

Other product families intended to be equipped with a flexible cord and a plug having rated current of 2,5 or 16 A and to be used in domestic, in commercial and in similar environment, e.g. equipment according to EN 60065, EN 60950, etc.

**8. Additional information concerning safety:**

Plugs and socket-outlets for domestic use in Finland shall be certified by a notified body in EU before they are placed on the market. This is to ensure the compatibility with our national system. For SELV-plugs and plugs for the supply of IT equipment the certification requirement does not apply.

## **Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61**

**1. Country: FRANCE**

**2. Special national conditions based on regulations applicable to plugs and socket-outlets:**

NFC 15-100 (French Wiring Rules - Arrêté Ministériel Equipement et Logement du 22 octobre 1969).

**3. National standards applicable to plugs:**

NF C 61- 300 Electrical accessories for domestic and similar purposes. Plugs and socket-outlets and couplers rated 20 A and 32 A

NF C 61- 303 Electrical accessories for domestic and similar purposes. 10/16A 250V plugs and socket-outlets and couplers

NF C 61- 304 Electrical accessories for domestic and similar purposes. Flat non-rewirable two pole plugs 2,5A 250V, with cord, for the connection of class II equipment for household and similar purposes.

NF C 61- 307 Electrical accessories for domestic and similar purposes. Round non-rewirable two pole plugs 2,5a 250V, with cord, for the connection of class II equipment for household and similar purposes.

NF C 61- 316 Electrical accessories for domestic and similar purposes. Plugs and socket-outlets and couplers rated 20A and 32A. Characteristics

NF C 61- 320 Electrical accessories for domestic and similar purposes. Plugs and socket-outlets and couplers rated 6A.

**4. CLC/TC 61 products or product families affected by the requirements:**

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	NF C 61-304 NFEN 50075		FR1
2P	6	250	NF C 61-320		FR1 (ss I)
2P+ earth	20 & 32	250	NF C 61-300		FR1 (ss II)
2P	10/16	250	NF C 61-303		FR2 (ss IA)
2P	10/16	250	NF C 61-303		FR2 (ss IIIA)
2P+earth	10/16	250	NF C 61-303		FR3 (ss VA)

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

**8. Additional information concerning safety:**

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country: UNITED KINGDOM**

**2. Special national conditions based on regulations applicable to plugs:**

Special National conditions based on the regulation "The plugs and socket-outlets etc. (Safety) Regulation 1994, Statutory Instrument N° 1768"

**3. National standards applicable to plugs:**

BS.546, BS.1363, BS.4573

**4. CLC/TC 61 products or product families affected by the requirements:**

Household appliances.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

EN 60065 (see SNC on 15.1.1), EN 60335 (see SNC on 25.6), EN 60598 (see SNC on 5.2.1), EN 60950 (see SNC on 3.2.1).

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P+ earth	2	250	BS.546		GB2
2P+ earth	5	250	BS.546		GB3
2P+ earth	13	250	BS.1363		GB1
2P+ earth	15	250	BS.546		GB4
2P+ earth	30	250	BS.546		GB5
2P	0,2	200/250	BS.4573		GB6

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

Luminaires, Electronic apparatus, IT equipment.



**8. Additional information concerning safety:**

- In UK, socket-outlets are supplied via a 32amp ring-circuit so a fused plug is essential.
- EN 50075 (Europlug) is forbidden in the UK by the Plug & Socket Safety Regulations, 1994, except for equipment intended to be used with a safety-isolating transformer (bathrooms).
  1. due to lack of a fuse in the plug
  2. due to dangerous compatibility with BS 1363 and BS 546 5amp socket-outlets.
- UK uses a polarised plug and socket system.
- 2P plugs are not allowed in BS 1363 and BS 546 systems.

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** GREECE

**2. Special national conditions based on regulations applicable to plugs:**

Government Gazette N° 67/B)28-01-2000

**3. National Standards applicable to plugs:**

ELOT EN 50075: 1992 Flat non-rewirable two-pole plugs, 2,5A 250V, with cord for the connection of class II equipment for household and similar purposes (identical to EN 50075: 1990)

ELOT 294: 1997 (identical to CEE 7)

ELOT 1423-1: 1999 Plugs and socket-outlets for household and similar purposes (identical to IEC 60884-1: 1994)

**4. CLC/TC 61 Products or product families affected by the requirements:**

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	CEE 7	XVI	-
2P	16	250	CEE 7	XVII	-
2P + earth	16	250	CEE 7	IV	-
2P + earth	16	250	CEE 7	VI	-
2P + earth	16	250	CEE 7	VII	-

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

**8. Additional information concerning safety:**

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country: IRELAND**

**2. Special national conditions based on regulations applicable to plugs:**

Regulation N° 525 of 1997: National Standard Authority of Ireland (Section 28) (13A plugs and conversion adaptors for domestic use) Regulations, 1997.

Regulation No.526 of 1997: National Standards Authority of Ireland (Section 28) (Electrical Plugs, Plug Similar devices and sockets for Domestic Use) Regulations 1997.

**3. National Standards applicable to plugs:**

I.S.401:1997:13A plugs and all electrical apparatus >200V, up to and including 13A, intended to be connected to a fixed socket-outlet, generally domestic use.

**4. CLC/TC 61 Products or product families affected by the requirements:**

All electrical appliances.

**5. CLC/TC 61 (draft) European Standards affected by the requirements: EN 60335**

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P+E	13	250	I.S. 401:1997		
2P	2.5	250	I.S. EN 50075		

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

EN 60950, EN 60598, etc. All electrical products, rated > 200V, intended to be connected by means of a plug and socket arrangement.

**8. Additional information concerning safety:**

Plugs must be approved; apparatus must be fitted with plugs when sold.

Approval required from a "designated person", which includes those persons notified to EU under Article 11 of the LVD (prior to amendment 93/68/EEC).

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country: ICELAND**

**2. Special national conditions based on regulations applicable to plugs:**

There is no formal regulation in ICELAND setting requirements for plugs for household equipment.

**3. National Standards applicable to plugs:**

IEC 60884-1 for plugs 250V, 16A for household and similar equipment (dimensions according to CEE7:1963 ss IV, VII and XVII)

IST EN 50075: 1990 for flat plugs 2,5A

Note: other types of plugs and socket-outlets are used: e.g. Bticino type, etc.

**4. CLC/TC 61 Products or product families affected by the requirements:**

**5. CLC/TC 61 EN /prEN affected by the requirements:**

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	IST EN 50075		
2P	10/16	250	(CEE7)	(ss XVII)	
2P+ earth *	10/16	250	(CEE7)	(ss IV)	
2P+ earth**	10/16	250	(CEE7)	(ss VII)	
*with side earthing-contacts					
**with dual earthing-contacts					

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

**8. Additional information concerning safety:**

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** ITALY

**2. Special national conditions based on regulations applicable to plugs:**

None.

**3. National Standards applicable to plugs:**

Plugs shall comply with the following Italian Standards:

CEI EN 50075:1992 (CEI 23-34)

CEI 23-50:1995 (Which complies with the safety requirements of IEC 60884-1)

CEI 23-5 + V2 + V3 and CEI 23-16 + V1 + V2 + V3 + V4 + V5 + V6

**4. CLC/TC 61 Products or product families affected by the requirements:**

All.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

Series EN 60335.

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	CEI EN 50075	S 33	IT1
2P	10	250	CEI 23-5	S10	IT1
2P + earth	10	250	CEI 23-5	S11, SPA11, SPB11	IT2 IT3
2P	16	250	CEI 23-5	S16 and S32	IT5 IT6
2P + earth	16	250	CEI 23-5	S17, SPA17, SPB17, S30 and S31	IT4 IT5 IT6 IT7

**7. Main products or product families other than those covered by CLC/TC 61, affected by the requirements:**

Products covered by other CLC/TCs such as e.g. luminaires, electromedical equipment, TV sets, computers.

**8. Additional information concerning safety:**

The Italian plugs together with the relevant socket outlets assure the safety level required by installation rules and product standards. In addition socket-outlets provided with shutters are required in order to increase safety, in particular for applications when children or handicapped persons are present.

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** LUXEMBOURG

**2. Special national conditions based on regulations applicable to plugs:**

None.

**3. National Standards applicable to plugs:**

EN 50075:1990

**4. CLC/TC 61 Products or product families affected by the requirements:**

All.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

EN 60335-x series

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current	Rated voltage	National Standard		IEC Report 60083
	A	V	Identification	Standard sheet	
2P	2,5	250	EN 50075:1990	1	DE 2
2P +earth	16	250	-/- <sup>*)</sup>	-/-	DE 1

<sup>\*)</sup>No National Standard (Luxembourg) exists, but the German Schuko-system is commonly used.

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

Products covered by other CLC/TCs, such as luminaries, audio and video equipment, office equipment, electromedical equipment, supply units, portable residual current devices.

**8. Additional information concerning safety:**

None.

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** NETHERLANDS

**2. Special national conditions based on regulations applicable to plugs:**

None.

**3. National Standards applicable to plugs:**

NEN 1020 and NEN-EN 50075.

**4. CLC/TC 61 Products or product families affected by the requirements:**

All.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

EN 60355 series

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	NEN-EN 50075	1	NL5
2P	2.5	250	NEN 1020	XVI	NL3
2P	6	250	NEN 1020	CII	NL6
2P	16	250	NEN 1020	II	NL1
2P + earth	16	250	NEN 1020	IV & VII	NL2
2P	16	250	NEN 1020	XVII	NL4

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

Products covered by other CLC/TC's, such as luminaires, audio and video equipment, office equipment, electromedical equipment, supply units, portable residual current devices.

**8. Additional information concerning safety:**

None.



## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** NORWAY

**2. Special national conditions based on regulations applicable to plugs:**

None.

**3. National Standards applicable to plugs:**

NEK EN 50075 for 2,5A 250V plugs for class II appliances. This standard is identical to EN 50075.

NEK 502: 1991 containing the SS IV, XVI and XVII according to CEE7.

NEK IEC 884-1(safety requirements according to IEC 884-1:1994)

**4. CLC/TC 61 Products or product families affected by the requirements:**

Plugs and socket-outlets for household and similar use

Plugs for appliances, etc, for household and similar use

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

None.

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	NEK EN 50075		NO4
2P	16	250	NEK 502	(ss II)	NO1
2P	16	250	NEK 502	(ss XVII)	NO4
2P+ earth	16	250	NEK502	(ss IV)	NO2
2P+ earth *	16	250	NEK602		NO3

\* for the supply of IT equipment

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

**8. Additional information concerning safety:**

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** PORTUGAL

**2. Special national conditions based on regulations applicable to plugs:**

None

**3. National Standards applicable to plugs:**

NP 1260:1993, harmonized with IEC 60884-1:1987 + A1:1988 + A2:1991

**4. CLC/TC 61 Products or product families affected by the requirements:**

All

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

EN 60335 series

**6. Summary description of the requirements:**

Characteristics of the plugs			Standard sheets according to		
N° of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2.5	250	NP 1260	X	PT 4
2P	6	250	NP 1260	VIII	PT 5
2P	16	250	NP 1260	II - XI	PT 3
2P+ EARTH	16	250	NP 1260	IV - IX	PT 1
2P+ EARTH	16	250	NP 1260	VI	PT 2

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

Products covered by other CENELEC Technical Committees, such as luminaires, audio and video equipment, medical electrical equipment, supply units and portable residual current devices.

**8. Additional information concerning safety:**

According to the new National Installation Rules (actually under study), the mandatory use of socket-outlets with shutters shall be extended to domestic installations (for general use).

## Enquiry at BT level on special requirements related to plugs for household appliances covered by CLC/TC 61

**1. Country:** SWEDEN

**2. Special national conditions based on regulations applicable to plugs:**

Authority regulations ELSÄK-FS 2000-1, clause 12, require use of standardized types as mentioned below.

**3. National Standards applicable to plugs:**

SS 428 08 34, which has to be used together with IEC 60884-1 (implemented in SS-IEC 60884-1), SS-EN 50075.

**4. CLC/TC 61 Products or product families affected by the requirements:**

All products provided with plug for general use.

**5. CLC/TC 61 (draft) European Standards affected by the requirements:**

All products provided with plug for general use.

**6. Summary description of the requirements:**

Characteristics of the plug			Standard sheets according to		
No of poles	Rated current A	Rated voltage V	National Standard		IEC Report 60083
			Identification	Standard sheet	
2P	2,5	250	EN 50075	-	SE4 (EN 50075)
2P	2,5	250	SS 428 08 34 IEC 60884-1	XVI	SE3 (ss XVI)
2P*	16	250	SS 428 08 34 IEC 60884-1	II	SE1 (ss II)
2P	16	250	SS 428 08 34 IEC 60884-1	XVII	SE4 (ss XVII)
2P + earth	16	250	SS 428 08 34 IEC 60884-1	IV	SE1 (ss IV)
2P + earth**	16	250	SS 428 08 34 IEC 60884-1	IV a	SE2 (ss IV A)
2P + earth	16	250	SS 428 08 34 IEC 60884-1	VII	SE2 (ss VII)
2P + earth**	16	250	SS 428 08 34 IEC 60884-1	VII a	SE2 (ss VII A)

\* For class 0 appliances  
 \*\* Polarized plug for information technology, rarely used

**7. Main products or product families, other than those covered by CLC/TC 61, affected by the requirements:**

All products provided with plugs for general use.

**8. Additional information concerning safety:**

National standard SS 428 08 31 for plugs and socket outlets for connection of luminaires exist.



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